

NASA Technical Memorandum 86804

Bibliography for Aircraft Parameter Estimation

Kenneth W. Iliff and Richard E. Maine

OCTOBER 1986

NASA

NASA Technical Memorandum 86804

Bibliography for Aircraft Parameter Estimation

Kenneth W. Iliff and Richard E. Maine
Ames Research Center
Dryden Flight Research Facility
Edwards, California



National Aeronautics
and Space Administration

Scientific and Technical
Information Branch

1986

PREFACE

A bibliography is a useful source of potential references for research in any field of study. An extensive bibliography has not been available in the field of aircraft parameter estimation, and this document is the result of an effort to fill this void. The list is extensive, although not exhaustive, and does contain definitive works related to most aircraft parameter estimation approaches. Theoretical studies as well as practical applications are included. Many of these publications are pertinent to subjects peripherally related to parameter estimation, such as aircraft maneuver design or instrumentation considerations.

This bibliography was generated by soliciting useful reference material from leading international parameter estimation specialists; the primary criterion for including any reference was that it be considered meaningful by some specialists. There is no claim that the list is complete.

BIBLIOGRAPHY

- Anon.: Total In-Flight Simulator (TIFS) — Preliminary Design Report. Technical Report AFFDL-TR-71-119, pp. 25-26, Aug. 1971.
- Anon.: Parameter Estimation Techniques and Applications in Aircraft Flight Testing. NASA TN D-7647, 1974.
- Abbot, W.Y.; Boirun, B.H.; Hill, G.E.; and Tavares, E.J.: Flight Evaluation Pacer Systems Low-Range Airspeed System LORAS 1000, Final Report. US AAEFA Project No. 75-17-1, Edwards Air Force Base, California, May 1977.
- Acton, Forman S.: Numerical Methods that Work. Harper & Row, New York, 1970.
- AGARD: AGARD Flight Test Instrumentation Series, vols. 1-15. AGARD-AG-160, 1972-1983.
- AGARD: Methods for Aircraft State and Parameter Identification. AGARD-CP-172, May 1975.
- AGARD: The Effects of Buffeting and Other Transonic Phenomena on Maneuvering Combat Aircraft. AGARD-AR-82, July 1975.
- AGARD: Stall/Spin Problems of Military Aircraft. AGARD-CP-199, June 1976.
- AGARD: Flight/Ground Testing Facilities Correlation. AGARD-CP-187, 1976.
- AGARD: Flight Test Techniques — of Aircraft and Weapon Systems Control. AGARD-CP-223, 1977.
- AGARD: Dynamic Stability Parameters. AGARD-CP-235, 1978.
- AGARD: High Angle of Attack Aerodynamics. AGARD-CP-247, Jan. 1979 (a).
- AGARD: Parameter Identification. AGARD-LS-104, 1979 (b).
- AGARD: Aerodynamic Characteristics of Controls. AGARD-CP-262, May 1979 (c).
- AGARD: Dynamic Stability Parameters. AGARD-LS-114, 1981.
- AGARD: Ground/Flight Test Techniques and Correlation. AGARD-CP-339, 1983.
- A'Harrah, R.C.; Lamanna, W.J.; and Hodgkinson, J.: Are Today's Specifications Appropriate for Tomorrow's Aeroplanes? Stability and Control, AGARD-CP-260, Paper 23, May 1979.
- Akaike, Hirotugu: A New Look at Statistical Model Identification. IEEE Trans. Automat. Control, vol. AC-19, no. 6, pp. 716-723, Dec. 1974.
- Anglin, E.: Aerodynamic Characteristics of Fighter Configurations During Spin Entries and Developed Spins. J. Aircraft, vol. 15, no. 11, pp. 769-776, Nov. 1978.
- Aoki, Masanao: Optimization of Stochastic Systems; Topics in Discrete-Time Systems. Academic Press, New York, 1967.
- Aoki, Masanao; and Staley, R.M.: On Input Signal Synthesis in Parameter Identification. Preprints Fourth International Federation of Automatic Control Congress, Warsaw, Poland, 1969.
- Apostol, Tom M.: Calculus: Volume II. Second ed. Xerox College Publishing, Waltham, Massachusetts, 1969.
- Ash, Robert B.: Basic Probability Theory. John Wiley & Sons, New York, 1970.
- Astrom, Karl J.: Introduction to Stochastic Control Theory. Academic Press, New York, 1970.
- Astrom, K.J.; and Eykhoff, P.: System Identification — a Survey. Automatica, vol. 7, no. 2, pp. 123-162, Mar. 1970.
- Attfellner, S.; and Rade, M.: BO 105 In-Flight Simulator for Flight Control and Guidance Systems. First European Rotorcraft and Powered Lift Aircraft Forum, Southampton, Great Britain, Sept. 1975.
- Bach, R.E.; and Wingrove, R.C.: Applications of State Estimation in Aircraft Flight Data Analysis. AIAA Paper 83-2087, Aug. 1983.
- Balakrishnan, A.V.: Communication Theory. McGraw-Hill Book Co., New York, 1968.
- Balakrishnan, A.V.: Introduction to Optimization Theory in a Hilbert Space. Springer-Verlag, Berlin, 1971.

- Balakrishnan, A.V.: Stochastic Differential Systems I. Filtering and Control; A Function Space Approach. M. Beckmann, G. Goos, and H.P. Kunzi, eds., Springer-Verlag, Berlin, 1973. (Lecture Notes in Economics and Mathematical Systems, vol. 84.)
- Balakrishnan, A.V.: Stochastic Filtering and Control. Optimization Software, Inc., Los Angeles, 1981.
- Balakrishnan, A.V.: Kalman Filtering Theory. Optimization Software, Inc., New York, 1984.
- Balakrishnan, A.V.; and Peterka, V.: Identification in Automatic Control System, Automatica, vol. 5, pp. 817-829, Nov. 1969.
- Banerjee, D.; and Hohenemser, K.H.: Optimum Data Utilization for Parameter Identification with Application to Lifting Rotors. J. Aircraft, vol. 13, pp. 1014-1016, Dec. 1976.
- Bard, Yonathon: Comparison of Gradient Methods for the Solution of Nonlinear Parameter Estimation Problems. SIAM J. Numer. Anal., vol. 7, no. 1, pp. 157-186, Mar. 1970.
- Barnard, G.A.: Thomas Bayes — A Biographical Note. Biometrika, vol. 45, pp. 293-295, 1958.
- Batterson, James G.: Analysis of Oscillatory Motion of a Light Airplane at High Values of Lift Coefficient. NASA TM-84563, 1983.
- Bayes, Thomas: An Introduction to the Doctrine of Fluxions, and a Defence of the Mathematicians Against the Objections of the Author of "The Analyst." John Noon, London, 1736. (For additional information see Barnard, 1958.)
- Bendix Corp.: ACIP Error Correction Models Final Report. BSR 4426, Contract NAS9-15588, Bendix Corporation, Ann Arbor, Michigan, Oct. 1980.
- Bennett, G.E.; Mace, W.D.; and Pool, A.: Magnetic Recording of Flight Test Data. Flight Test Instrumentation Series, AGARD-AG-160, vol. 5, Feb. 1974.
- Bennett, Robert M.; Farmer, Moses G.; Mohr, Richard L.; and Hall, W. Earl, Jr.: A Wind-Tunnel Technique for Determining Stability Derivatives from Cable-Mounted Models. J. Aircraft, vol. 15, no. 5, pp. 304-310, May 1978.
- Best, M.R.: Three-Dimensional Flight-Path Reconstruction by Means of Spline Approximation. National Aerospace Laboratory, NLR TR 83091 U, The Netherlands, 1983.
- Bierman, Gerald J.: Factorization Methods for Discrete Sequential Estimation. Academic Press, New York, 1977. (Mathematics in Science and Engineering, vol. 128.)
- Box, George E.P.; and MacGregor, John F.: The Analysis of Closed-Loop Dynamic-Stochastic Systems. Technometrics, vol. 16, no. 3, pp. 391-398, Aug. 1974.
- Box, G.E.P.; and MacGregor, J.F.: Parameter Estimation with Closed-Looped Operating Data. Proc. Sixth International Federation of Automatic Control, Triennial World Congress, Boston and Cambridge, Massachusetts, 1975, Paper 38-5, 1975.
- Bramwell, A. R. S.: Helicopter Dynamics. Edward Arnold Publishers, London, 1976.
- Brauer, Fred; and Nohel, John A.: Qualitative Theory of Ordinary Differential Equations; an Introduction. W.A. Benjamin, New York, 1969.
- Breeman, J.H.: Parameter Identification Results of Tests in Non-Steady Symmetric Flight with the Hawker Hunter Mk 7. National Aerospace Laboratory NLR TR 83042, The Netherlands, 1983.
- Breeman, J.H.; and Simons, J.L.: Evaluation of a Method to Extract Performance Data from Dynamic Maneuvers for a Jet Transport Aircraft. Proc. Eleventh Congress of the International Council of the Aeronautical Sciences, Lisbon, Sept. 1978, vol. 1, pp. 475-488, International Council of the Aeronautical Sciences Secretariat (DGLR), Cologne, 1978.
- Breeman, J.H.; Erkelens, L.J.J.; and Nieuwpoort, A.M.H.: Determination of Performance and Stability Characteristics from Dynamic Manoeuvres with a Transport Aircraft Using Parameter Identification Techniques. National Aerospace Laboratory NLR MP 84024, The Netherlands, 1984.
- Breeman, J.H.; Van Woerkom, K.; Jonkers, H.L.; and Mulder, J.A.: Aspects of Flight Test Instrumentation. Parameter Identification, AGARD-LS-104, Paper 4, Oct. 1979.
- Brenner, Martin J.; Iliff, Kenneth W.; and Whitman, Robert K.: Effect of Sampling Rate and Record Length on the Determination of Stability and Control Derivatives. NASA TM-72858, 1978.
- Briczinski, S.J., and Cooper, D.E.: Flight Investigation of Rotor/Vehicle State Feedback. NASA CR-132546, 1975.
- Brockett, Roger W.: Finite Dimensional Linear Systems. John Wiley & Sons, New York, 1970.

- Bryant, W.H.; and Hodge, W.F.: A Monte Carlo Analysis of the Effects of Instrumentation Errors on Aircraft Parameter Identification. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 5, May 1975.
- Bryson, Arthur E., Jr.; and Ho, Y. Ch.: Applied Optimal Control, Optimization, Estimation and Control. Ginn and Company, Lexington, Massachusetts, 1969.
- Bucy, Richard S.; and Joseph, Peter D.: Filtering for Stochastic Processes with Applications to Guidance. Interscience Publishers, New York, 1968.
- Burton, R.A.: Advancement in Parameter Identification and Aircraft Flight Testing. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 15, May 1975.
- Caines, Peter E.; and Chan, C.W.: Feedback Between Stationary Stochastic Processes. IEEE Trans. Automat. Control, vol. AC-20, pp. 498-508, Aug. 1975.
- Caines, P.E.; and Sinha, S.: An Application of the Statistical Theory of Feedback to Power System Identification. Proc. 1975 IEEE Conference on Decision and Control, Including the 14th Symposium on Adaptive Processes, Houston, pp. 584-589, Dec. 1975.
- Cannaday, R.L.; and Suit, W.T.: Effects of Control Inputs on the Estimation of Stability and Control Parameters of a Light Airplane. NASA TP-1043, 1977.
- Carter, J.: The Measurement of Helicopter Air Data Using a Swivelling Pitot-Static Pressure Probe. Air Data Symposium, Naval Postgraduate School, Monterey, June 1976; Proceedings, Session V: Helicopter/VSTOL Sensors, Monterey, California, 1976.
- Chalk, C.R.: Technical Evaluation Report on the Flight Mechanics Panel Symposium on Stability and Control. AGARD-AR-134, Jan. 1979.
- Charon, W.; and Verbrugger, R.A.: Nouvelle Technique d'essais sur Maquettes Libres Pour la Détermination de Caractéristiques Aérodynamiques. Dynamic Stability Parameters, AGARD-CP-235, Paper 2, 1978.
- Chen, R.T.N.: Input Design for Aircraft Parameter Identification: Using Time-Optimal Control Formulation. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 13, May 1975.
- Chen, R.T.N.; Eulrich, B.J.; and Lebecqz, J.V.: Development of Advanced Techniques for the Identification of V/STOL Aircraft Stability and Control Parameters. Cornell Aeronautical Lab., Inc., Rept. No. CAL-BM-2820-F-1, AD-730121, 1971.
- Clark, Daniel C.; and Droll, John: General Purpose Airborne Simulator-Conceptual Design Report. NASA CR-544, 1966.
- Corbin, M.: A Preliminary Study of an Adaptive Flight Control System Using In-Flight Identification of Three Aircraft Coefficients. RAE TR 75012, Mar. 1975.
- Cox, A.B.; and Bryson, A.E., Jr.: Identification by a Combined Smoothing Nonlinear Programming Algorithm. Automatica, vol. 16, no. 6, pp. 689-694, Nov. 1980.
- Cramér, Harald. Mathematical Methods of Statistics. Princeton University Press, Princeton, New Jersey, 1946.
- Davidon, W.C.: Variable Metric Methods for Minimization. A.E.C. Research and Development Report ANL-5990, Rev. Argonne National Lab., Argonne, Illinois, 1959.
- Defalque, B.; Gevers, M.; and Installé, M.: Combined Identification of the Input-Output and Noise Dynamics of a Closed-Loop Controlled Linear System. Int. J. Control, vol. 24, no. 3, pp. 345-360, Sept. 1976.
- Dennis, J.E., Jr.: Non-Linear Least-Squares and Equations. Conference on the State of the Art in Numerical Analysis, York, 1976, D. Jacobs, ed., The State of the Art of Numerical Analysis, pp. 269-312. Academic Press, New York, 1977.
- De Leo, R.V.; and Jensen, D.P.: Low Range Orthogonal Airspeed System. Air Data Symposium, Naval Postgraduate School, Monterey, June 1976; Proceedings, Session V: Helicopter/VSTOL Sensors, Monterey, California, 1976.
- Derbyshire, Thomas; and Sidwell, Kenneth W.: PAN Air Summary Document (Version 1.0). NASA CR-3250, 1982.
- Determann, O.: Ermittlung von dynamischen Derivativen der Längs- und Seitenbewegung mit der mobilen oszillierenden Derivativwaage und systematische Untersuchungen zum Einfluss einiger Parameter auf die Ergebnisse. DGLR-78-115, Jahrestagung der DGLR, Darmstadt, 19-23 Sept. 1978.

- Deutsch, R.: Estimation Theory. Prentice Hall, Englewoods Cliffs, New Jersey, 1965.
- Dixon, L.C.W.: Nonlinear Optimization. Crane, Russak & Co., New York, 1972.
- Doetsch, Karl H.: The Time Vector Method for Stability Investigations. A.R.C. R. & M. 2945, Aug. 1953.
- Dongarra, J.J.; Moler, C.B.; Bunch, J.R.; and Stewart, G.W.: LINPACK Users' Guide. Society for Industrial and Applied Mathematics, Philadelphia, 1979.
- DuBro, G.A.; Kim, D.G.; and Rudd, M.J.: An Electro-Optic Airspeed Sensor. Air Data Symposium, Naval Postgraduate School, Monterey, June 1976; Proceedings, Session IV: Helicopter/VSTOL Sensors, Monterey, California, 1976. (Also published in Electro-Optical Systems Design Conference and International Laser Exposition, New York, Sept. 14-16, 1976; Proc. Technical Program, pp. 384-392, Chicago, 1976.)
- Edwards, John W.; Deets, Dwain A.: Development of a Remote Digital Augmentation System and Application to a Remotely Piloted Research Vehicle. NASA TN D-7941, 1975.
- Ericsson, L.E.: Technical Evaluation Report on the Fluid Dynamics Panel Symposium on Dynamic Stability Parameters. AGARD-AR-137, Apr. 1979.
- Ericsson, L.E.: Support Interference. Dynamic Stability Parameters, AGARD-LS-114, Paper 8, May 1981.
- Etkin, Bernard: Dynamics of Flight. John Wiley & Sons, New York, 1959.
- Eulrich, B.J.; and Rynaski, E.G.: Identification of Nonlinear Aerodynamic Stability and Control Parameters at High Angle of Attack. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, pp. 2-1 to 2-15, 1975.
- Eulrich, B.J.; Govindaraj, K.S.; and Harrington, W.W.: Estimation of the Aerodynamic Stability and Control Parameters for the F-106A Aircraft from Flight Data: Maneuver Design and Flight Data Analysis. AIAA Paper 78-1326, 1978.
- Eykhooff, Pieter: System Identification, Parameter and State Estimation. John Wiley & Sons, London, 1974.
- Fagin, S.L.: Recursive Linear Regression Theory, Optimal Filter Theory and Error Analysis of Optimal Systems. IEEE International Convention Record, Part I, Session 30, pp. 216-240, 1964.
- Feik, R.A.: On the Application of Compatibility Checking Techniques to Dynamic Flight Test Data. Department of Defence Aerodynamics Report 161, Defence Science and Technology Organisation, Aeronautical Research Laboratories, Melbourne, Victoria, Australia, 1984.
- Ferguson, Thomas S.: Mathematical Statistics: A Decision Theoretic Approach. Academic Press, New York, 1967.
- Findlay, J.T.: ACIP Performance Assessment During STS-1 Re-Entry — Comparisons with IMU Measurements and Trajectory Prediction Considerations. AMA Rep. No. 81-26, Contract NAS1-16087, Sept. 1981.
- Fink, Marvin P.; and Freeman, Delma C., Jr.: Full-Scale Wind-Tunnel Investigation of Static Longitudinal and Lateral Characteristics of a Light Twin-Engine Airplane. NASA TN D-4983, 1969.
- Fisher, R.A.: On the Mathematical Foundations of Theoretical Statistics. Philos. Trans. Roy. Soc. London, vol. 222, pp. 309-368, 1922.
- Fisher, Ronald A.: Contributions to Mathematical Statistics. John Wiley & Sons, New York, 1950.
- Fiske, P.H.; and Price, C.F.: A New Approach to Model Structure Identification. AIAA Paper 77-1171, 1977.
- Flack, Nelson D.: AFFTC Stability and Control Technique. AFFTC-TN-59-21, Edwards, California, 1959.
- Fletcher, R.; and Powell, M.J.D.: A Rapidly Convergent Descent Method for Minimization. Comput. J., vol. 6, no. 2, pp. 163-168, July 1963.
- Foster, G.W.: Identification of Hunter Mk 12 Longitudinal and Lateral Aerodynamic Stability and Control Derivatives. RAE TR 77009, 1977.
- Foster, G.W.: A Description of the Weighted Least Squares Output Error Method of Parameter Identification. RAE TM FS 215, 1978.
- Foster, G.W.: Wind Tunnel Calibration of An Aircraft Pitot-Static and Flow-Direction Measuring Nose Probe. RAE TR 80077, 1980.

- Foster, G.W.: The Identification of Aircraft Stability and Control Parameters in Turbulence. RAE TR 83025, 1982. (Also available as Ph.D. Thesis, California Institute of Technology, Pasadena, California, 1982.)
- Froisy, J.B.; Smith, C.L.; Corripio, A.B.; and Murrill, P.W.: Closed-Loop Identification of System Dynamics in the Presence of Noise and Unmeasured Disturbances, Proc. 15th Joint Automatic Control Conference, Austin, Texas, pp. 293-302, 1974.
- Fu, K.H.; and Marchand, M.: Helicopter System Identification in the Frequency Domain. Ninth European Rotorcraft Forum, Paper 96, Stresa, Italy, September 13-15, 1983.
- Gainer, Thomas G.; and Hoffman, Sherwood: Summary of Transformation Equations and Equations of Motion Used in Free-Flight and Wind Tunnel Data Reduction and Analysis. NASA SP-3070, 1972.
- Galbraith, T.J.; and Petersen, T.J.: Nonlinear Parameter Identification and Its Application to Transport Aircraft. Dynamic Stability Parameters, AGARD-CP-235, Paper 18, 1978.
- Garbow, B.S.; Boyle, J.M.; Dongarra, J.J.; and Moler, C.B.: Matrix Eigensystem Routines — EISPACK Guide Extension. Springer-Verlag, Berlin, 1977. (Lecture notes in Computer Science, 51.)
- Garretson, H.C., III: Beaver Aircraft Parameter Identification Technical Preparations and Preliminary Results. DFVLR-Mitt. 78-01, DFVLR Institut für Flugmechanik, Braunschweig, Federal Republic of Germany, July 1978.
- Garretson, H.C., III: Beaver Aircraft Parameter Identification-Technical Preparations and Preliminary Results. DFVLR-Mitt. 78-01, DELVR Instit für Flugmechanik, Braunschweig, Federal Republic of Germany, Aug. 1978.
- Gauss, Karl Friedrich: Theory of the Motion of the Heavenly Bodies Moving About the Sun in Conic Sections; a Translation of Theoria Motus. Translated and with an Appendix by Charles Henry Davis in 1857. Dover Publications, New York, 1963.
- Gerlach, O.H.: Determination of Performance, Stability and Control Characteristics from Measurements in Non-Steady Manoeuvres. Stability and Control, Part 1, AGARD-CP-17, pp. 499-523, Sept. 1966.
- Gerlach, O.H.: Determination of Performance and Stability Parameters from Nonsteady Flight Test Manoeuvres. SAE National Business Aircraft Meeting, Wichita, Kansas, SAE Paper 700236, March 18-20, 1970.
- Gerlach, O.H.: The Determination of Stability Derivatives and Performance Characteristics from Dynamic Manoeuvres. Flight Test Techniques, AGARD CP-85, Paper 16, 1971.
- Gessow, Alfred; and Myers, Garry C.: Aerodynamics of the Helicopter. Frederick Ungar Publishing Co., New York, 1967.
- Geyser, Lucille C.; and Lehtinen, Bruce: Digital Program for Solving the Linear Stochastic Optimal Control and Estimation Problem. NASA TN D-7820, Mar. 1975.
- Gibson, J.C.: Flying Qualities and the Fly-By-Wire Aeroplane. Stability and Control, AGARD-CP-260, Paper 22, May 1979.
- Gill, Philip E.; and Murray, Walter: Nonlinear Least Squares and Nonlinearly Constrained Optimization. Dundee Conference on Numerical Analysis, 1975; Numerical Analysis, pp. 134-147, Springer-Verlag, Berlin, 1976. (Lecture Notes in Mathematics, No. 506.)
- Gilyard, Glenn B.: Determination of Propulsion-System-Induced Forces and Moments of a Mach 3 Cruise Aircraft. Parameter Estimation Techniques and Application in Aircraft Flight Testing, NASA TN D-7647, pp. 369-374, 1974.
- Gilyard, Glenn B.; and Belte, Daumants: Flight-Determined Lag of Angle-of-Attack and Angle-of-Sideslip Sensors in the YF-12A Airplane From Analysis of Dynamic Manoeuvres. NASA TN D-7819, 1974.
- Golub, G.H.: Matrix Decompositions and Statistical Calculations. In R.D. Milton and John A. Nelder (eds.), Statistical Computation, pp. 365-397, Academic Press, New York, 1969.
- Golub, G.H.; and Pereyra, V.: The Differentiation of Pseudo-Inverses and Nonlinear Least Squares Problems Whose Variables Separate. SIAM J. Numer. Anal., vol. 10, no. 2, pp. 413-432, Apr. 1973.
- Goodson, R.E.; and Polis, M. (eds.): Identification of Parameters in Distributed Systems. Proc. Joint Automatic Control Conference, Austin, Texas, June 17-21, p. 155, 1974.
- Goodwin, Graham C.: An Overview of the System Identification Problem — Part 4: Experiment Design. Sixth IFAC Symposium on Identification and System Parameter Estimation, Washington, D.C., June 1982, G.A. Bekey and G.N. Saridis, eds., Pergamon Press, Oxford, 1983.
- Goodwin, Graham C.; and Payne, Robert L.: Dynamic System Identification: Experiment Design and Data Analysis. Academic Press, New York, 1977.

- Goodwin, G.C.; Payne, R.L.; and Murdoch, J.C.: Optimal Test Signal Design for Linear Single Input-Single Output Closed Loop Identification. Conference on Computer Aided Control System Design, University of Cambridge, IEE Publication No. 96, Institution of Electrical Engineers, London, 1973.
- Gould, D.G.; and Hindson, W.S.: Estimates of the Lateral-Directional Stability Derivatives of a Helicopter from Flight Measurements. National Research Council Canada, Aeronautical Report LR-572, NRC-13882, Dec. 1973.
- Gould, D.G.; and Hindson, W.S.: Estimates of the Stability Derivatives of a Helicopter from Flight Measurements. Ninth Congress of the International Council of the Aeronautical Sciences, Haifa, Israel, Aug. 25-30, IGAS Paper 74-49, 1974.
- Gould, D.G.; and Hindson, W.S.: Estimates of the Stability Derivatives of a Helicopter and a V/STOL Aircraft from Flight Data. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, pp. 23-1 to 23-9, May 1975.
- Gracey, William: Measurement of Aircraft Speed and Altitude. NASA RP-1046, 1980.
- Graupe, Daniel: On Identifying Stochastic Closed-Loop Systems. IEEE Trans. Automat. Control, vol. AC-20, pp. 553-555, Aug. 1975.
- Greenberg, Harry: A Survey of Methods for Determining Stability Parameters of an Airplane from Dynamic Flight Measurements. NACA TN-2340, 1951.
- Greenstadt, John: On the Relative Efficiencies of Gradient Methods. Math. Comp., vol. 21, no. 99, pp. 360-367, July 1967.
- Grove, R.D.; Bowles, R.L.; and Mayhew, S.C.: A Procedure for Estimating Stability and Control Parameters from Flight Test Data by Using Maximum Likelihood Methods Employing a Real-Time Digital System. NASA TN D-6735, 1972.
- Gupta, Narendra K.: New Frequency Domain Methods for System Identification. Proc. Joint Automatic Control Conference, San Francisco, June 22-24, 1977, vol. 2, pp. 804-808, Institute of Electrical and Electronic Engineers, New York, 1977.
- Gupta, Narendra K.; and Hall, W. Earl, Jr.: Design and Evaluation of Sensor Systems for State and Parameter Estimation. J. Guid. Control, vol. 1, no. 6, pp. 397-403, Nov.-Dec. 1978.
- Gupta, Naren K.; and Iliff, Kenneth W.: Identification of Aerodynamic Indicial Functions Using Flight Data. AIAA Paper 82-1375, Aug. 1982.
- Gupta, N.K.; and Mehra, R.K.: Computational Aspects of Maximum Likelihood Estimation and Reduction in Sensitivity Function Calculations. IEEE Trans. Automat. Control, vol. AC-19, no. 6, pp. 774-783, Dec. 1974.
- Gupta, Narendra K.; Hall, W. Earl, Jr.; and Trankle, Thomas L.: Advanced Methods of Model Structure Determination from Test Data. J. Guid. Control, vol. 1, no. 3, pp. 197-204, May-June 1978.
- Hafer, X.: Wind Tunnel Testing of Dynamic Derivatives in W. Germany. Dynamic Stability Parameters, AGARD-CP-235, Paper 5, 1978.
- Hajdasinski, A.K.; Eykhoff, P.; Damen, A.A.H.; and van den Boom, A.J.W.: The Choice and Use of Different Model Sets for System Identification. Sixth IFAC Symposium on Identification and System Parameter Identification, Washington, D.C., June 7-11, 1982, pp. 47-55, Pergamon Press, Oxford and New York, 1983.
- Hall, W.E.; and Bryson, A.E.: Inclusion of Rotor Dynamics in Controller Design for Helicopters. J. Aircraft, vol. 10, no. 4, pp. 200-206, Apr. 1973.
- Hall, W.E., Jr.; Gupta, N.K.; and Hansen, R.S.: Rotorcraft System Identification Techniques for Handling Qualities and Stability and Control Evaluation. Preprint No. 78-30, Proc. 34th Annual Forum of the American Helicopter Society, Washington, D.C., May 1978.
- Hall, W.E., Jr.; Gupta, N.K.; and Tyler, J.S.: Model Structure Determination and Parameter Identification for Nonlinear Aerodynamic Flight Regimes. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 21, 1974.
- Hamel, P.G.: A Systems Analysis View of Aerodynamic Coupling. J. Aircraft, vol. 7, no. 6, pp. 567-569, Nov.-Dec. 1970.
- Hamel, P.G.: Aircraft Parameter Identification Methods and Their Applications - Survey and Future Aspects. Parameter Identification, AGARD-LS-104, Paper 1, 1979.
- Hamel, P.G.: Determination of Aircraft Dynamic Stability and Control Parameters from Flight Testing. Dynamic Stability Parameters, AGARD-LS-114, Paper 10, May 1981.
- Hamel, P.G.; and Krag, B.: Dynamic Windtunnel Simulation of Active Control Systems. Stability and Control, AGARD-CP-260, Paper 16A, May 1979.

- Herrington, R.M.; Shoemaker, R.E.; Bartlett, E.P.; and Dunlap, E.W.: Flight Test Engineering Handbook. AFFTC-TR-6273, Edwards, California, AD-636392, Jan. 1966.
- Hodge, Ward F.; and Bryant, Wayne H.: Monte Carlo Analysis of Inaccuracies in Estimated Aircraft Parameters Caused by Unmodeled Flight Instrumentation Errors. NASA TN D-7712, 1975.
- Hodgkinson, J.; LaManna, W.J.; and Heyde, J.L.: Handling Qualities of Aircraft with Stability and Control Augmentation Systems — A Fundamental Approach. Aeronaut. J., vol. 80, no. 782, pp. 75-81, Feb. 1976.
- Hohenemser, K.H.; Banerjee, D.; and Yin, S.K.: Rotor Dynamic State and Parameter Identification from Simulated Forward Flight Transients. Part 1: NASA CR-137963; Part 2: NASA CR-137964, June 1976.
- Hohenemser, K.H.; and Banerjee, D.: Application of System Identification to Analytical Rotor Modeling from Simulated and Wind Tunnel Dynamic Test Data, Part 2. NASA CR-152023, 1977.
- Hohenemser, K.H.; and Crews, Sam T.: Unsteady Hovering Wake Parameters Identified from Dynamic Model Tests, Part 1. NASA CR-152022, 1977.
- Hohenemser, K.H.; and Yin, S.K.: On the Use of First Order Rotor Dynamics in Multiblade Coordinates. Preprint No. 831, Proc. 30th Annual National Forum of the American Helicopter Society, Washington, D.C., May 7-9, 1974.
- Holleman, Euclid C.: Summary of Flight Tests to Determine the Spin and Controllability Characteristics of a Remotely Piloted, Large-Scale (3/8) Fighter Airplane Model. NASA TN D-8052, 1976.
- Horsten, J.J.; Jonkers, H.L.; and Mulder, J.A.: Flight Path Reconstruction in the Context of Nonsteady Flight Testing. Technische Hogeschool, Delft (Netherlands), Report LR-280, May 1979.
- Hosman, R.J.A.W.: A Method to Derive Angle of Pitch, Flight-Path Angle and Angle of Attack from Measurements in Nonsteady Flight. Technische Hogeschool, Delft (Netherlands), Report VTH-156, Apr. 1971.
- Hosman, R.J.A.W.: Advanced Flight Test Instrumentation: Design and Calibration. Technische Hogeschool, Delft (Netherlands), Report VTH-M-222, Oct. 1974.
- Hosman, R.J.A.W.: Advanced Flight Test Instrumentation: Design and Calibration. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 6, May 1975.
- Howard, J.: The Determination of Lateral Stability and Control Derivatives from Flight Data. Can. Aeronautics Space J., vol. 13, no. 3, pp. 126-134, Mar. 1967.
- Hsia, Tien C.: System Identification: Least-Squares Methods. D.C. Heath and Co., Lexington, Massachusetts, 1977.
- Huber, H.: Parametric Trends and Optimization — Preliminary Selection of Configuration — Prototype Design and Manufacture. Helicopter Aerodynamics and Dynamics, AGARD-LS-63, Paper 7, Apr. 1973.
- Huber, H.: Effect of Torsion-Flap-Lag Coupling on Hingeless Rotor Stability. 29th Annual National Forum of the American Helicopter Society, Washington, D.C., AHS Reprint 731, May 9-11, 1973.
- Iliff, Kenneth W.: Identification and Stochastic Control with Application to Flight Control in Turbulence. Ph.D. Dissertation, Univ. of California, Los Angeles, May 1973.
- Iliff, Kenneth W.: Maximum Likelihood Estimation of Lift and Drag from Dynamic Aircraft Maneuvers. J. Aircraft, vol. 14, no. 12, pp. 1175-1181, Dec. 1977.
- Iliff, Kenneth W.: Identification and Stochastic Control of an Aircraft Flying in Turbulence. J. Guid. Control, vol. 1, no. 2, pp. 101-108, Mar.-Apr. 1978 (a).
- Iliff, Kenneth W.: Estimation of Aerodynamic Characteristics from Dynamic Flight Test Data. Dynamic Stability Parameters, AGARD-CP-235, Paper 15, Nov. 1978 (b).
- Iliff, Kenneth W.: Aircraft Identification Experience. Parameter Identification, AGARD-LS-104, Paper 6, 29 Oct.-2 Nov. 1979.
- Iliff, Kenneth W.; and Maine, Richard E.: Practical Aspects of Using a Maximum Likelihood Estimator. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 16, May 1975.
- Iliff, Kenneth W.; and Maine, Richard E.: Further Observations on Maximum Likelihood Estimates of Stability and Control Characteristics Obtained from Flight Data. AIAA Paper 77-1133, Hollywood, Florida, Aug. 1977.
- Iliff, Kenneth W.; and Maine, Richard E.: NASA Dryden's Experience in Parameter Estimation and Its Use in Flight Test. AIAA Paper 82-1373, AIAA AFM Conference, San Diego, California, Aug. 1982.
- Iliff, Kenneth W.; and Taylor, Lawrence W., Jr.: Determination of Stability Derivatives from Flight Data Using a Newton-Raphson Minimization Technique. NASA TN D-6579, 1972.

- Iliff, Kenneth W.; Maine, Richard E.; and Shafer, Mary: Subsonic Stability and Control Derivatives for an Unpowered, Remotely Piloted 3/8-scale F-15 Airplane Model Obtained from Flight Test. NASA TN D-8136, 1976.
- Iliff, Kenneth W.; Maine, Richard E.; and Steers, Sandra Thornberry: Flight-Determined Stability and Control Coefficients of the F-111A Airplane. NASA TM-72851, 1978.
- Iliff, Kenneth W.; Maine, Richard E.; and Montgomery, T.D.: Important Factors in the Maximum Likelihood Analysis of Flight Test Maneuvers. NASA TP-1459, 1979.
- Iliff, Kenneth W.; Maine, Richard E.; and Cooke, Douglas R.: Selected Stability and Control Derivatives from the First Space Shuttle Entry. AIAA Paper 81-2451. AIAA/SETP/SFTE/SAE First Flight Testing Conference, Nov. 1981.
- Jategaonkar, Ravindra; and Plaetschke, Ermin: Maximum Likelihood Parameter Estimation from Flight Test Data for General Non-Linear Systems. DFVLR-FB 83-14, AD-B076999, Apr. 1983.
- Jazwinski, Andrew H.: Stochastic Processes and Filtering Theory. Academic Press, New York, 1970.
- Jeglum, P.M.: Air Force Flight Test Center Experience in the Identification of Stability and Control Parameters from Dynamic Flight Test Maneuvers. Dynamic Stability Parameters, AGARD-CP-235, Paper 14, Nov. 1978.
- Johnston, D.E.: Identification of Key Maneuver-Limiting Factors in High-Angle-of-Attack Flight. Dynamic Stability Parameters, AGARD-CP-235, Paper 36, Nov. 1978.
- Jonkers, H.L.: Application of the Kalman Filter to Flight Path Reconstruction from Flight Test Data Including Estimation of Instrumental Bias Error Corrections. Delft Technische Hogeschool, Department of Aerospace Engineering, Delft, Report VTH-162, 1976.
- Jonkers, H.L.; and Mulder, J.A.: New Developments and Accuracy Limits in Aircraft Flight Testing. AIAA Aircraft Systems and Technology Meeting, Dallas, Texas, AIAA Paper 76-897, Sept. 1976 (a).
- Jonkers, H.L.; and Mulder, J.A.: Accuracy Limits in Nonsteady Flight Testing. Tenth Congress of the International Council of the Aeronautical Sciences, Ottawa, ICAS Paper 76-46, Oct. 1976 (b).
- Jonkers, H.L.; Mulder, J.A.; and Horsten, J.J.: Introduction to State Reconstruction of Dynamic Flight Test Manoeuvres. Control and Dynamic Systems, Advances in Theory and Applications, Vol. 21, C.T. Leondes, ed., Academic Press, New York, 1984.
- Jonkers, H.L.; Mulder, J.A.; and Woerkom van, K.: Measurements in Nonsteady Flight: Instrumentation and Analysis. Proc. Seventh International Aerospace Instrumentation Symposium, Cranfield, England, March 20-23, 1972, pp.21.1-21.10; Peter Peregrinus, Ltd., Stevenage, Herts, 1972.
- Joy, D.: Airspeed and Direction Measurement by Vortex Detection. Air Data Symposium Proceedings, Naval Postgraduate School, Session IV: Helicopter/VSTOL Sensors, Monterey, California, June 1976.
- Kagiwada, Harriet H.: System Identification, Methods and Applications. Addison-Wesley Publishing Co., Reading, Massachusetts, 1974.
- Kailath, Thomas: Linear Systems. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1980.
- Kailath, Thomas: Lectures on Wiener and Kalman Filtering. New, Revised Edition. Springer-Verlag, New York, 1981.
- Kailath, T.; and Lyung, L.: Asymptotic Behavior of Constant-Coefficient Riccati Differential Equations. IEEE Trans. Automat. Control, vol. AC-21, pp. 385-388, June 1976.
- Kaletka, J.: Rotorcraft Identification Experience. Parameter Identification, AGARD-LS-104, Paper 7, 1979.
- Kaletka, J.; and Langer, H.J.: Correlation Aspects of Analytical, Wind Tunnel and Flight Test Results for a Hingeless Rotor Helicopter. Group/Flight Test Techniques and Correlation, AGARD-CP-339, Paper 16, 1982.
- Kaletka, J.; and Rix, O.: Aspects of System Identification of Helicopters. Third European Rotorcraft and Powered Lift Aircraft Forum, Aix-en-Provence, France, Paper 15, Sept. 1977.
- Kalman, R.E.; and Bucy, R.S.: New Results in Linear Filtering and Prediction Theory. Trans. ASME, Ser. D, J. Basic Eng., vol. 63, pp. 95-107, 1961.
- Kaminski, P.G.; Bryson, A.E.; and Schmidt, S.F.: Discrete Square Root Filtering — A Survey of Current Techniques. IEEE Trans. Automat. Control, vol. 16, no. 6, pp. 727-736, Dec. 1971.
- Kanning, G.; and Biggers, J.C.: Application of a Parameter Identification Technique to a Hingeless Helicopter Rotor. NASA TN D-7834, 1974.
- Kashyap, R.L.: Maximum Likelihood Identification of Stochastic Linear Systems. IEEE Trans. Automat. Control, vol. AC-15, no. 1, pp. 25-34, Feb. 1970.

- Klein, V.: Parameter Identification Applied to Aircraft. Cranfield Report Aero No. 26, Cranfield Inst. of Technology, 1974 (a).
- Klein, V.: Longitudinal Aerodynamic Derivatives of a Slender Delta-Wing Research Aircraft Extracted from Flight Data. Cranfield Report Aero No. 27, CIT-FI-74-023, Cranfield Inst. of Technology, July 1974 (b).
- Klein, V.: On the Adequate Model for Aircraft Parameter Estimation. Cranfield Report Aero No. 28, Cranfield Inst. of Technology, March 1975.
- Klein, V.: Determination of Longitudinal Aerodynamic Derivatives From Steady-State Measurement of an Aircraft. AIAA Paper 77-1123, Hollywood, Florida, Aug. 1977.
- Klein, V.: Aircraft Parameter Estimation in Frequency Domain. AIAA Paper 78-1344, 1978.
- Klein, V.: Determination of Stability and Control Parameters of a Light Airplane From Flight Data Using Two Estimation Methods. NASA TP-1306, 1979.
- Klein, V.: Identification Evaluation Methods. Parameter Identification, AGARD-LS-104, Paper 2, 29 Oct.-2 Nov. 1979.
- Klein, Vladislav: Maximum Likelihood Method for Estimating Airplane Stability and Control Parameters From Flight Data in Frequency Domain. NASA TP-1637, 1980.
- Klein, V.; and Batterson, J.G.: Determination of Airplane Aerodynamic Parameters From Flight Data at High Angles of Attack. Proc. Thirteenth Congress of the International Council of the Aeronautical Sciences, vol. I, B. Laschka and R. Staufenbiel, eds., pp. 467-474, American Institute of Aeronautics and Astronautics, New York, 1982.
- Klein, Vladislav; and Batterson, James G.: Determination of Airplane Model Structure From Flight Data Using Splines and Stepwise Regression. NASA TP-2126, 1983.
- Klein, Vladislav; and Batterson, James G.: Aerodynamic Characteristics of a Fighter Airplane Determined From Flight and Wind Tunnel Data. NASA TP-2483, 1985.
- Klein, V.; and Keskar, A.D.: Frequency Domain Identification of a Linear System Using Maximum Likelihood Estimation. Fifth IFAC Symposium on Identification and System Parameter Estimation, Darmstadt, Sept. 1979. Pergamon Press, Oxford, 1980.
- Klein, V.; and Schiess, J.R.: Compatibility Check of Measured Aircraft Responses Using Kinematic Equations and Extended Kalman Filter. NASA TN D-8514, 1977.
- Klein, V.; and Williams, D.A.: On Some Problems Related to the Identification of Aircraft Parameters. Proc. Third IFAC Symposium on Identification and System Parameter Estimation, The Hague, June 12-15, 1973, pp. 435-444, North Holland, Amsterdam, 1973.
- Klein, Vladislav; Batterson, James G.; and Murphy, Patrick C.: Determination of Airplane Model Structure From Flight Data by Using Modified Stepwise Regression. NASA TP-1916, Oct. 1981.
- Klein, V.; Batterson, J.G.; and Smith, P.L.: On the Determination of Airplane Model Structure From Flight Data. Sixth IFAC Symposium on Identification and System Parameter Estimation, vol. 2, George A. Bekey and George N. Saridis, eds., pp. 1034-1039, Pergamon Press, Oxford, 1982.
- Kleingeld, H.W.: Design and Evaluation of a Symmetric Flight Test Manoeuvre for the Estimation of Longitudinal Performance and Stability and Control Characteristics. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, pp. 9-1 to 9-6, 1974.
- Klopfenstein, H.B.: Obtaining Airplane Drag Data from Nonsteady Flight. AIAA Paper 65-211, 1965.
- Kloster, M.; Kaletka, J.; and Schaufele, H.: Parameter Identification of a Hingeless Rotor Helicopter in Flight Conditions with Increased Instability. Sixth European Rotorcraft and Powered Lift Aircraft Forum, Bristol, England, Sept. 16-19, 1980, Conference Papers, Part 2, University of Bristol, Bristol, 1980.
- Koehler, R.; and Marchand, M.: Open/Closed Loop Identification of Stability and Control Characteristics of Combat Aircraft. Stability and Control, AGARD-CP-260, Paper 16, May 1979.
- Koehler, R.; and Wilhelm, K.: Auslegung von Eingangssignalen für die Kennwertermittlung. IB 154-77/40, DFVLR Institut für Flugmechanik, Braunschweig, Federal Republic of Germany, Dec. 1977.
- Koehler, R.; and Wilhelm, K.: Closed Loop Aspects of Aircraft Identification. Parameter Identification, AGARD-LS-104, Paper 10, 29 Oct.-2 Nov. 1979.
- Krag, B.: The Wind Tunnel Behaviour of a Scaled Model with a Gust Alleviation System in a Deterministic Gust Field. Symposium Dynamic Analysis of Vehicle Ride and Manoeuvring Characteristics, London, Preprint pp. 149-166, Nov. 1978 (a).
- Krag, B.: Active Control Technology for Gust Alleviation. Von Karman Institute for Fluid Dynamics, Brussels, Active Control Technology, The Institute, Rhode St. Genese, Belgium (Von Karman Institute for Fluid Dynamics, Lecture Series 1978-1, vol. 2), Dec. 4-8, 1978 (b).

- Kurz, H.; and Isermann, R.: Methods for On-Line Process Identification in Closed Loop. Proc. International Federation of Automatic Control Sixth Triennial World Congress, Boston and Cambridge, Massachusetts, Aug. 24-30, 1975, Part 2, pp. 11.3 1 - 11.3 14, Instrument Society of America, Pittsburg, 1975.
- Kurzthals, P.R., ed.: Active Controls in Aircraft Design. AGARD-AG-234, Nov. 1978.
- Kushner, Harold J.: Introduction to Stochastic Control. Holt, Rinehart and Winston, New York, 1971.
- Kwakernaak, Hubert; and Sivan, Raphael: Linear Optimal Control Systems. Wiley & Sons, New York, 1972.
- Lainiotis, Demetrios G., ed.: Estimation Theory. American Elsevier Publishing Co., New York, 1974.
- Lawson, Charles L.; and Hanson, Richard J.: Solving Least Squares Problems. Prentice-Hall, Englewood Cliffs, New Jersey, 1974.
- Langer, H.J.; and Stricker, R.: Some Results of Dynamic Measurements with a Model Hingeless Rotor. Fifth European Rotorcraft and Powered Lift Aircraft Forum, Amsterdam, Netherlands, Sept. 1979.
- Levadi, Victor S.: Design of Input Signals for Parameter Estimation. IEEE Trans. Automat. Control, vol. 11, no. 2, pp. 205-211, 1966.
- Levan, N.: Systems and Signals. Optimization Software, Inc., New York, 1983.
- Levin, Morris J.: Optimal Estimation of Impulse Response in the Presence of Noise. IRE Trans. Circuit Theory, vol. CT-7, no. 1, pp. 50-56, Mar. 1960.
- Lindberger, N.A.: Stochastic Modelling of Computer-Regulated Linear Plants in Noisy Environments. Int. J. Control, vol. 16, no. 6, pp. 1009-1019, 1972.
- Lindberger, N.A.: Stochastic Identification of Computer-Regulated Linear Plants in Noisy Environments. Int. J. Control, vol. 17, no. 1, pp. 65-80, 1973.
- Liptser, Robert S.; and Shirayev, A.N.: Statistics of Random Processes. Translated by A.B. Aries, vol. 1: General Theory, Springer-Verlag, New York, 1977.
- Litmann, S.; and Huggins, W.H.: Growing Exponentials as a Probing Signal for System Identification. Proc. IEEE, vol. 51, pp. 917-923, June 1963.
- Liusternik, Lazar A.; and Sobolev, V.J.: Elements of Functional Analysis. Translated from the Russian by A.E. Labarre, Jr., Herbert Izicki, and H. Ward Crowley, Frederick Ungar Publishing Co., New York, 1961.
- Ljung, L.; Gustavsson, I.; and Soderstrom, T.: Identification of Linear, Multivariable Systems Operating Under Linear Feedback Control. IEEE Trans. Automat. Control, vol. AC-19, pp. 836-840, Dec. 1974.
- Lobbia, R.N.; and Saridis, G.N.: On-Line Identification of Multivariable Stochastic Feedback Systems. Thirteenth Joint Automatic Control Conference, Stanford, California, Aug. 16-18, 1972, Preprints of Technical Papers, pp. 802-810, American Institute of Astronautics, New York, 1972.
- Luenberger, David G.: Optimization by Vector Space Methods. John Wiley & Sons, New York, 1969.
- Luenberger, David G.: Introduction to Linear and Nonlinear Programming. Addison-Wesley, Reading, Massachusetts, 1973.
- Lumsden, R.B.: Estimation of Longitudinal Aerodynamic Derivatives of the Comet 3B from Flight Test Data Using an Automatic Model Matching Method. RAE TR 74103, 1974.
- Maine, Richard E.: Aerodynamic Derivatives for an Oblique Wing Aircraft Estimated from Flight Data by Using a Maximum Likelihood Technique. NASA TP-1336, 1978.
- Maine, Richard E.: User's Manual for SYNC, a FORTRAN Program for Merging and Time Synchronizing Data. NASA TM-81355, 1981 (a).
- Maine, Richard E.: Programmer's Manual for MMLE3, A General FORTRAN Program for Maximum Likelihood Parameter Estimation. NASA TP-1690, 1981 (b).
- Maine, Richard E.; and Iliff, Kenneth W.: A FORTRAN Program for Determining Aircraft Stability and Control Derivatives From Flight Data. NASA TN D-7831, 1975.
- Maine, Richard E.; and Iliff, Kenneth W.: Maximum Likelihood Estimation of Translational Acceleration Derivatives from Flight Data. J. Aircraft, vol. 16, no. 10, pp. 674-679, Oct. 1979.
- Maine, Richard E.; and Iliff, Kenneth W.: User's Manual for MMLE3, A General FORTRAN Program for Maximum Likelihood Parameter Estimation. NASA TP-1563, 1980.
- Maine, Richard E.; and Iliff, Kenneth W.: Formulation and Implementation of a Practical Algorithm for Parameter Estimation with Process and Measurement Noise. SIAM J. Appl. Math., vol. 41, no. 3, pp. 558-579, Dec. 1981 (a).

- Maine, Richard E.; and Iliff, Kenneth W.: The Theory and Practice of Estimating the Accuracy of Dynamic Flight-Determined Coefficients. NASA RP-1077, 1981 (b).
- Maine, Richard E.; and Iliff, Kenneth W.: Identification of Dynamic Systems. AGARD-AG-300, 1984.
- Maine, Richard E.; and Iliff, Kenneth W.: Application of Parameter Estimation to Aircraft Stability and Control — The Output-Error Approach. NASA RP-1168, 1986.
- Marchand, M.: Der Einfluss von Messfehlern auf die Bestimmbarkeit der Kennwerte der Längsbewegung. DFVLR IB 154-74/31, 1974.
- Marchand, M.: Untersuchung der Bestimmbarkeit der flugmechanischen Derivative des CCV-Versuchsträgers F-104 G. IB 154-77/12, DFVLR Institut für Flugmechanik, Braunschweig, Federal Republic of Germany, Mar. 1977.
- Marchand, M.; and Fu, K.-H.: Frequency Domain Parameter Estimation of Aeronautical Systems Without and With Time Delay. Seventh IFAC/IFORS Symposium on Identification and System Parameter Estimation, York, England, July 3-7, 1985.
- Marchand, M.; and Koehler, R.: Determination of Aircraft Derivatives by Automatic Parameter Adjustment and Frequency Response Methods. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, pp. 17-1 to 17-18, May 1975.
- Margason, R.J.; and Lamar, J.B.: Vortex Lattice FORTRAN Program for Estimating Subsonic Aerodynamic Characteristics of Complex Planforms. NASA TN D-6142, 1971.
- Marquardt, Donald W.: An Algorithm for Least Squares Estimation of Nonlinear Parameters. J. SIAM, vol. 11, pp. 431-441, 1963.
- Marquardt, Donald W.: Generalized Inverses, Ridge Regression, Biased Linear Estimation, and Nonlinear Estimation. Technometrics, vol. 12, no. 3, pp. 591-612, Aug. 1970.
- Matheny, Neil W.; and Pangeas, George N.: HiMAT Aerodynamic Design and Flight Test Experience. AIAA Paper 81-2433, Nov. 1981.
- McCracken, J.R.; Kaletka, J.; Meyer, H.; Rix, O.; and Gartung, B.: CASA C-212 Flight Test and Parameter Identification. Spain-Federal Republic of Germany Cooperative Research Program, DFVLR IB 154-76/16, 1976.
- McLaren, I.: Flight Test Instrumentation Series, Open and Closed Loop Accelerometers. AGARD-AG-160, vol. 6, July 1974.
- Meditch, J. S.: Stochastic Optimal Linear Estimation and Control. McGraw-Hill Book Co., New York, 1969.
- Mehra, R.K.: Identification of Stochastic Linear Dynamic Systems Using Kalman Filter Representation. AIAA J., vol. 9, no. 1, pp. 28-31, Jan. 1971.
- Mehra, R.K.: Optimal Inputs for Linear System Identification. Thirteenth Joint Automatic Control Conference, Stanford, California, Aug. 16-18, 1972, Preprints of Technical Papers, pp. 811-820, American Institute of Aeronautics and Astronautics, New York, 1972.
- Mehra, R.K.: Identification in Control and Econometrics; Similarities and Differences. Division of Engineering and Applied Physics, Harvard University, Cambridge, Massachusetts, Technical Report 647, AD-767393, 1973.
- Mehra, R.K.: Frequency-Domain Synthesis of Optimal Inputs for Linear System Parameter Estimation. Division of Engineering and Applied Physics, Harvard University, Cambridge, Massachusetts, Technical Report 645, July 1973. (Also published in ASME Trans. Ser. G, J. Dynamic Systems, Measurement and Control, vol. 98, June 1976, pp. 130-138. ASME Paper 76-AUT-V.)
- Mehra, R.K.: Optimal Input Signals for Parameter Estimation in Dynamic Systems, Survey and New Results. IEEE Trans. Automat. Control, vol. AC-19, no. 6, pp. 753-768, Dec. 1974.
- Mehra, R.K.; and Gupta, N.K.: Status of Input Design for Aircraft Parameter Identification. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 12, May 1975.
- Mehra, Raman K.; and Lainiotis, Dimitri G. (eds.): System Identification: Advances and Case Studies. Academic Press, New York, 1976.
- Mendel, Jerry M.: Discrete Techniques of Parameter Estimation: The Equation Error Formulation. Marcel Dekker, Inc., New York, 1973.
- Moler, C.B.; and Stewart, G.W.: An Algorithm for Generalized Matrix Eigenvalue Problems. SIAM J. Numer. Anal., vol. 10, no. 2, pp. 241-256, Apr. 1973.
- Moler, Cleve; and Van Loan, Charles: Nineteen Dubious Ways to Compute the Exponential of a Matrix. SIAM Rev., vol. 20, no. 4, pp. 801-836, Oct. 1978.

- Molusis, J.A.: Helicopter Stability Derivative Extraction and Data Processing Using Kalman Filtering Techniques. 28th Annual National Forum of the American Helicopter Society, Washington, D.C., May 17-19, 1972. AHS Preprint No. 641, 1972.
- Molusis, J.A.: Analytical Study to Define a Helicopter Stability Derivative Extraction Method, vol. 1: Final Report. NASA CR-132371, 1973.
- Molusis, J.A.: Helicopter Stability Derivative Extraction from Flight Data Using the Bayesian Approach to Estimation. J. Am. Helicopter Soc., vol. 18, no. 2, pp. 12-23, Apr. 1973.
- Molusis, J.A.: Rotorcraft Derivative Identification from Analytical Models and Flight Test Data. Rotorcraft Parameter Identification, Session V, AGARD-CP-172, Paper 24, May 1975.
- Mulder, J.A.: Aircraft Performance Measurements in Nonsteady Flights. Proc. Third International Federation of Automatic Control Symposium on Identification and System Parameter Estimation, Part 2, Delft, The Hague, pp. 1131-1145, June 12-15, 1973.
- Mulder, J.A.: Some Aspects of Performance Measurements in Non-steady Flight. Bestimmung Von Flugzeugkennndaten aus Flugversuchen, DLGR-Mitt-73-25 und Raumfahrt, Cologne, 1973. (Translated as Determination of Aircraft Characteristics From Flight Tests, European Space Agency, Paris, pp. 171-190, Nov. 1974.
- Mulder, J.A.: Estimation of the Aircraft State in Non-steady Flight. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 19, May 1975.
- Mulder, J.A.: Estimation of Thrust and Drag in Non-steady Flight. Proc. Fourth International Federation of Automatic Control Symposium on Identification and System Parameter Estimation, Tbilisi, Georgian, USSR, Sept. 21-27, 1976.
- Mulder, J.A.: The Measurement of Performance, Stability and Control Characteristics of a High Subsonic Jet Aircraft in Non-steady Flight Conditions Employing High Accuracy Instrumentation Techniques. Aeronaut. J., vol. 81, pp. 247-258, June 1977.
- Mulder, J.A.; and den Hollander, J.G.: Status of Dynamic Flight Test Technology — Model Identification for Flight Simulation. SAE Business Aircraft Meeting and Exposition, Wichita, Kansas, SAE Paper 810597, Apr. 1981. (Also published in Trans. SAE, Sept. 1982.
- Mulder, J.A.; and Hosman, R.J.A.W.: The Application of High Accuracy Instrumentation Techniques to Aircraft Flight Testing. Shell Aviation News, no. 425, 1974.
- Mulder, J.A.; and van Sliedregt, J.M.: Estimation of Drag and Thrust of Jet-Propelled Aircraft by Nonsteady Flight Test Maneuvers. AGARD-CP-222, pp. 11-1 to 11-30, 1977.
- Mulder, J.A.; Jonkers, H.L.; Horsten, J.J.; Breeman, J.H.; and Simons, J.H.: Analysis of Aircraft Performance, Stability and Control Measurements, Part I: Theoretical Aspects in Parameter Identification. Parameter Identification, AGARD-LS-104, 1979.
- Mulder, J.A.; den Hollander, J.G.; and Binkhorst, H.: Aerodynamic Model Identification from Dynamic Flight Test Data and Wind Tunnel Experiments. Ground/Flight Test Techniques and Correlation, AGARD-CP-339, Paper 14, Jan. 1983. (Also published as Report VLR-361, Delft University of Technology, Technische Hogeschool, Delft, Netherlands, Oct. 1982.)
- Nahi, N.E.; and Napjus, G.A.: Design of Optimal Probing Signals for Vector Parameter Estimation. Proc. IEEE Conference on Decision and Control, Miami Beach, Florida, Dec. 15-17, 1971, IEEE, New York, pp. 162-168, 1971.
- Nahi, N.E.; and Wallis, D.E., Jr.: Optimal Inputs for Parameter Estimation in Dynamic Systems with White Observation Noise. Tenth American Automatic Control Council Joint Automatic Control Conference, University of Colorado, Boulder, Colorado, Preprints of Technical Papers, pp. 506-513, Aug. 5-7, 1969.
- Nering, Evar D.: Linear Algebra and Matrix Theory. Second ed. John Wiley & Sons, New York, 1970.
- Neveu, Jacques: Mathematical Foundations of the Calculus of Probability. Holden-Day, Inc., San Francisco, 1965.
- Nguyen, Luat T.; Gilbert, William P.; Gera, Joseph; Iliff, Kenneth W.; and Enevoldson, Einar K.: Application of High-Alpha Control System Concepts to a Variable-Sweep Fighter Airplane. AIAA Atmospheric Flight Mechanics Conference, Danvers, Massachusetts, Aug. 11-13, 1980, AIAA Paper 80-1582, 1980.
- Nippess, K.R.: Performance Estimation from Non-Steady Maneuvers. First AIAA, SETP, SFTE, SAE, ITEA and IEEE Flight Testing Conference, Las Vegas, Nevada, Nov. 11-13, 1981, AIAA Paper 81-2424, 1981.
- Norton, Harry N.: Handbook of Transducers for Electronic Measuring Systems. Prentice Hall, Englewood Cliffs, New Jersey, 1969.
- Ogata, Katsuhiko: Modern Control Engineering. Prentice-Hall, Englewood Cliffs, New Jersey, 1970.
- O'Leary, C.O.: Wind-Tunnel Measurement of Lateral Aerodynamic Derivatives Using a New Oscillatory Rig and Comparisons for a Gnat Aircraft. RAE TR 77159, 1977.

- Oppenheim, A.V.; and Shafer, R.W.: Digital Signal Processing. Prentice-Hall, Englewood Cliffs, New Jersey, 1975.
- Orlik-Rückemann, K.J.: Aerodynamic Coupling between Lateral and Longitudinal Degrees of Freedom. AIAA J., vol. 15, no. 12, pp. 1792-1799, Dec. 1977.
- Orlik-Rückemann, K.J.: Techniques for Dynamic Stability Testing in Wind Tunnels. Dynamic Stability Parameters, AGARD-CP-235, Paper 1, 1978.
- Paige, Lowell J.; Swift, J. Dean; and Slobko, Thomas A.: Elements of Linear Algebra. Second ed. Xerox College Publishing, Lexington, Massachusetts, 1974.
- Panich, Yu. V.; and Trachevskii, M.L.: Identification of a Class of Closed-Loop Control Systems. Automation and Remote Control, vol. 34, no. 9, pt. 2, pp. 1457-1466, Feb. 15, 1974.
- Papoulis, Athanasios: Probability, Random Variables, and Stochastic Processes. McGraw-Hill Book Co., New York, 1965.
- Park, Gary D.: Determination of Tail-Off Aircraft Parameters, Systems Identification. Proc. AIAA Third Atmospheric Flight Mechanics Conference, Arlington, Texas, pp. 128-136, June 7-9, 1976.
- Park, Gary D.: Parameter Identification Technology Used in Determining In-Flight Airload Parameters. J. Aircraft, vol. 14, pp. 251-256, March 1977.
- Penrose, R.: A Generalized Inverse for Matrices. Proc. Cambridge Philosophical Society 51, pt. 3, pp. 406-413, 1955.
- Perkins, Courtland D.; and Hage, Robert E.: Airplane Performance Stability and Control. John Wiley & Sons, New York, 1949.
- Pitman, Edwin. J.G.: Some Basic Theory for Statistical Inference. Chapman and Hall, London, 1979.
- Plaetschke, E.: Parameter Identification: Its Purpose, Methods, and Resulting Requirements for Flight Test Instrumentation. AGARD/Cranfield/DFVLR Short Course on Flight Test Instrumentation, 1977.
- Plaetschke, E.; and Schulz, G.: Practical Input Signal Design. Parameter Identification, AGARD-LS-104, Paper 3, 29 Oct.-2 Nov. 1979.
- Plaetschke, E.; Mulder, J.A.; and Breeman, J.H.: Flight Test Results of Five Input Signals for Aircraft Parameter Identification. Proc. Sixth IFAC Symposium on Identification and System Parameter Estimation, Washington, D.C., Jan. 7-11, 1982, vol. 2, pp. 1149-1154, Pergamon Press, Oxford and New York, 1983.
- Plaetschke, E.; Mulder, J.A.; and Breeman, J.H.: Results of Beaver Aircraft Parameter Identification. DFVLR-FB 83-10, 1983.
- Polak, Elijah: Computational Methods in Optimization: A Unified Approach. Academic Press, New York, 1971.
- Pool, A.; and Bosman, D.: Basic Principles of Flight Test Instrumentation Engineering. AGARD Flight Test Instrumentation Series, AGARD-AG-160, vol. 1, 1974.
- Potter, James E.: Matrix Quadratic Solutions. SIAM J. Appl. Math., vol. 14, no. 3, pp. 496-501, May 1966.
- Poulter, R.L.: Measurement of the Yawing Moment of Inertia of an Aircraft (HP 115) in Flight. RAE A.R.C. R. & M. 3691, 1972.
- Pouwels, H.: Instrumentation for the Determination of Aircraft Performance from Dynamic Maneuvers. Proc. 25th International Instrumentation Symposium, Anaheim, California, May 7-10, 1979, Part 2, pp. 611-621, Instrument Society of America, 1979.
- Powell, M.J.D.: An Efficient Method for Finding the Minimum of a Function of Several Variables Without Calculating Derivatives. Comput. J., vol. 7, no. 2, pp. 155-162, July 1974.
- Powell, J. David; and Tyler, James S., Jr.: Application of the Kalman Filter and Smoothing to VTOL Parameter and State Identification. 11th American Automatic Control Council, Joint Automatic Control Conference, Georgia Institute of Technology, Atlanta, June 22-26, 1970, Paper 18-G, pp. 449-450, American Society of Mechanical Engineering, New York, 1970.
- Powers, Bruce G.: Phugoid Characteristics of a YF-12 Airplane With Variable-Geometry Inlets Obtained in Flight Tests at a Mach Number of 2.9. NASA TP-1107, 1977.
- Prasad, R.M.; Sinha, A.K.; and Mahalanabis, A.K.: Two-Stage Identification of Closed-Loop Systems. IEEE Trans. Automat. Control, vol. AC-22, no. 6, pp. 987-988, Dec. 1977.
- Priestley, M.B.: Estimation of Transfer Functions in Closed Loop Stochastic Systems. Automatica, vol. 5, no. 5, pp. 623-632, Sept. 1969.

- Ramachandran, S.; Schneider, H.; Mason, J.D.; and Stalford, H.L.: Identification of Aircraft Aerodynamic Characteristics at High Angles of Attack and Sideslip Using the Estimation Before Modelling (EBM) Technique. AIAA Paper 77-1169, 1977.
- Ramachandran, S.; and Wells, W.R.: Estimation of Nonlinear Aerodynamic Derivatives of a Variable Geometry Fighter Aircraft from Flight Data. AIAA Paper 74-790, 1974.
- Rampy, John M.; and Berry, Donald T.: Determination of Stability Derivatives from Flight Test Data by Means of High Speed Repetitive Operation Analog Matching. FTC-TDR-64-8, Edwards, California, May 1964.
- Rao, C.R.: Linear Statistical Inference and Its Applications. John Wiley & Sons, New York, 1965.
- Rao, S.S.: Optimization, Theory and Applications. Wiley Eastern Limited, New Delhi, 1978.
- Reichert, G.: Basic Dynamics of Rotors: Control and Stability of Rotary Wing Aircraft: Aerodynamics and Dynamics of Advanced Rotary-Wing Configurations. Helicopter Aerodynamics, AGARD-LS-63, Paper 3, Apr. 1973.
- Reid, G.E.A.: Validation of Kinematic Compatibility of Flight Data Using Parameter Estimation Methodology. RAE TR 81020, Mar. 1981.
- Reid, G.E.A.: Identification of the Aerodynamic Stability and Control Derivatives of an Unpowered Free-Flight Aircraft Model. RAE TR 81146, Jan. 1981.
- Renz, Ronald R.L.; Clarke, Robert; Mosser, Mark A.; Roskam, Jan; and Rummer, Dale: Development of a Simple, Self-Contained Flight Test Data Acquisition System. SAE Business Aircraft Meeting and Exposition, Wichita, Kansas, April 7-10, 1981, SAE Paper 810596, 1981.
- Rix, O.; and Hanke, D.: In-Flight Measured Characteristics of Combined Flap-Spoiler Direct Lift Controls. Aerodynamic Characteristics of Controls, AGARD-CP-262, Paper 16, Sept. 1979.
- Rix, O.; Huber, H.; and Kaletka, J.: Parameter Identification of a Hingeless Rotor Helicopter. Proc. 33rd Annual Forum of the American Helicopter Society, Washington, D.C., May 9-11, AHS 77-33-42, 1977.
- Rödger, P.: Statistischer Fehler bei der Systemidentifizierung im geschlossenen Regelkreis. Regelungstechnik und Prozess Datenverarbeitung, vol. 22, pp. 282-283, 1974.
- Rosenbrock, H.H.: An Automatic Method for Finding the Greatest or Least Value of a Function. Comput. J., vol. 3, pp. 175-184, 1960.
- Ross, A. Jean: Determination of Aerodynamic Derivatives From Transient Responses in Manoeuvring Flight. Technical Memorandum Aero 1598, Royal Aircraft Establishment, 1974. (Also published in Methods for Aircraft State and Parameter Identification, AGARD-CP-172, May 1975.)
- Ross, A. Jean. Determination of Aerodynamic Derivatives from Transient Response in Manoeuvring Flight. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 14, 1974.
- Ross, A. Jean: Application of Parameter Identification Techniques to the Analysis of Flight Data. Prog. Aerospace Sciences, vol. 18, no. 4, pp. 325-349, 1979.
- Ross, A. Jean: Identification Experience in Extreme Flight Regimes. Parameter Identification, AGARD-LS-104, Paper 8, Nov. 1979.
- Ross, A. Jean: Revised Values of the Lateral Aerodynamic Deviations of the Gnat Aircraft From Flight Tests. RAE TR 80099, 1980.
- Ross, A. Jean; and Foster, G.W.: Fortran Programs for the Determination of Aerodynamic Derivatives From Transient Longitudinal or Lateral Responses of Aircraft. RAE ARC CP-1344, 1976.
- Ross, A.J.; and Thomas, H.H.B.M.: A Survey of Experimental Data on the Aerodynamics of Controls in the Light of Future Needs. Aerodynamic Characteristics of Controls, AGARD-CP-262, Paper 2, Sept. 1979.
- Ross, A. Jean; Foster, G.W.; and Turvey, T.: An Investigation of Dutch Roll and Wing Rock Oscillations of a Gnat Trainer Aircraft: Flight Tests and Linear Analysis. RAE TR 78032, Mar. 1978.
- Rotier, D.J.; and Ferrin, F.J.: Ultrasonic Wind Vector Sensor. Air Data Symposium Proceedings, Naval Postgraduate School, Monterey, California, Session V: Helicopter/VSTOL Sensors, June 1976.
- Royden, H.L.: Real Analysis. Second ed. MacMillan, London, 1968.
- Rudin, Walter: Real and Complex Analysis. Second ed. McGraw-Hill, New York, 1974.
- Rynaski, Edmund G.; Andrisani, Dominick, II; and Weingarten, Norman C.: Identification of the Stability Parameters of An Aeroelastic Airplane. AIAA Paper 78-1328, Aug. 1978.
- Sage, Andrew P.; and Melsa, James L.: Estimation Theory with Application to Communications and Control. McGraw-Hill, New York, 1971.

- Sage, Andrew P.; and Melsa, James L.: System Identification. Academic Press, New York, 1971.
- Schmidt, E.: Die AVA-Derivativwaage. DLR-Mitt-74-32, July 1974.
- Schuetz, A.J.: Low Angle-of-Attack Longitudinal Aerodynamic Parameters of Navy T-2 Trainer Aircraft Extracted from Flight Data: A Comparison of Identification Techniques; Volume I-Data Acquisition and Modified Newton-Raphson Analysis. NADC-74181-30-VOL-1 AD-A013181, Naval Air Development Center, Warminster, Pennsylvania, June 23, 1975.
- Schulz, G.: Maximum Likelihood Identification Using Kalman Filtering Least-Squares Estimation. A Comparison for the Estimation of Stability Derivatives Considering Gust Disturbances. DLR-FB 75-94, Feb. 1975. (English Translation: European Space Agency TT 258.)
- Schulz, G.: Entwurf optimaler Eingangssignale für die System-identifizierung unter Berücksichtigung von Mess- und Systemrauschen. Regelungstechnik, Heft 10, pp. 324-330, 1977.
- Schulze, H.: Anwendung von Schätzverfahren für die Kenngrößen von Regelstrecken aufgrund von Messungen im geschlossenen Regelkreis. Regelungstechnik und Prozess-Datenverarbeitung, vol. 19, pp. 113-119, 1971.
- Schwalm, D.: Bestimmung des Frequenzganges eines linearen rückgekoppelten Systems mit zwei unabhängigen stochastischen Eingangssignalen. Regelungstechnik und Prozess-Datenverarbeitung, vol. 18, pp. 453-455, 1970.
- Schweppe, Fred C.: Uncertain Dynamic Systems. Prentice-Hall, Englewood Cliffs, New Jersey, 1973.
- Shafer, Mary F.: Stability and Control Derivatives of the T-37B Airplane. NASA TM X-56036, Sept. 1975.
- Shafer, Mary F.: Flight-Determined Correction Terms for Angle of Attack and Sideslip. AIAA Paper 82-1374, Aug. 1982 (a).
- Shafer, Mary F.: Low-Order Equivalent Models of Highly Augmented Aircraft Determined from Flight Data. J. Guid. Control Dynam., vol. 5, no. 5, pp. 504-511, Sept.-Oct. 1982 (b).
- Shinbrot, Marvin: A Least-Squares Curve Fitting Method With Application to the Calculation of Stability Coefficients From Transient Response Data. NACA TN-2341, Apr. 1951.
- Siemers, P.M., III; Wolf, H.; and Flanagan, P.F.: Shuttle Entry Air Data System Concepts Applied to Space Shuttle Orbiter Flight Pressure Data to Determine Air Data - STS 1-4. AIAA Paper 83-0118, Jan. 1983.
- Sim, Alex G.: A Correlation Between Flight-Determined Derivatives and Wind-Tunnel Data for the X-24B Research Aircraft. NASA SX-3371, 1976.
- Sisk, T.R.: A Technique for the Assessment of Fighter Aircraft Precision Controllability. AIAA Paper 78-1364, Aug. 1978.
- Skudridakis, Jean: Systemmodellierung Und Identifizierung von 'äquivalenten' Systemen mit und ohne Ersatzzeit für reglergesteuerte Flüge. DFVLR-FB 83-036, Nov. 1983. (Also published as translation ESA-TT-852.)
- Smith, H.J.: Flight-Determined Stability and Control Derivatives for an Executive Jet Transport. NASA TM X-56034, July 1975.
- Smith, R.H.: A Theory for Longitudinal Short-Period Pilot Induced Oscillations. AFFDL-TR-77-57, AD-A056982, June 1977.
- Smith, B.T.; Boyle, J.M.; Dongarra, J.J.; Garbow, B.S.; Ikebe, Y.; Klema, V.C.; and Moler, C.B.: Matrix Eigensystem Routines-EISPACK Guide. Second ed. Springer-Verlag, Berlin, 1976.
- Söderström, T.; Gustavsson, I.; and Ljung, L.: Identifiability Conditions for Linear Systems Operating in Closed Loop. Int. J. Control, vol. 21, no. 2, pp. 243-255, Feb. 1975.
- Söderström, T.; Ljung, L.; and Gustavsson, I.: Identifiability Conditions for Linear Multivariable Systems Operating Under Feedback. IEEE Trans. Automat. Control, vol. AC-21, pp. 837-840, Dec. 1976.
- Sorensen, John A.: Analysis of Instrumentation Error Effects on the Identification Accuracy of Aircraft Parameters. NASA CR-112121, 1972.
- Sorenson, Harold W.: Parameter Estimation; Principles and Problems. Marcel Dekker, Inc., New York, 1980.
- Stallford, H.L.: Application of the Estimation-Before-Modelling (EBM) System Identification Method to the High Angle of Attack/Sideslip Flight of the T-2C Jet Trainer Aircraft. Three vols., AD-A079924, Dynamics Research Corporation, System Division, Wilmington, Massachusetts, Nov. 1979.
- Stallford, H.L.: High-Alpha Aerodynamic Model Identification of T-2C Aircraft Using the EBM Method. J. Aircraft, vol. 18, no. 10, pp. 801-809, Oct. 1981.

- Steers, Sandra Thornberry; and Iliff, Kenneth W.: Effects of Time-Shifted Data on Flight-Determined Stability and Control Derivatives. NASA TN D-7830, 1975.
- Stepner, D.E.; and Mehra, R.K.: Maximum Likelihood Identification and Optimal Input Design for Identifying Aircraft Stability and Control Derivatives. NASA CR-2200, 1973.
- Stewart, G.W., III: A Modification of Davidon's Minimization Method to Accept Difference Approximation of Derivatives. J. ACM, vol. 14, no. 1, pp. 72-83, Jan. 1967.
- Strang, Gilbert: Linear Algebra and Its Applications. Second ed. Academic Press, New York, 1980.
- Subke, H.: Test Installations to Investigate the Dynamic Behaviour of Aircraft with Scaled Models in Wind Tunnels. Symposium Dynamic Analysis of Vehicle Ride and Manoeuvring Characteristics, London, Preprint pp. 137-148, Nov. 28-30, 1978.
- Suit, William T.: Aerodynamic Parameters of the Navion Airplane Extracted from Flight Data. NASA TN D-6643, 1972.
- Tanner, Russel R.; and Montgomery, Terry D.: Stability and Control Derivative Estimates Obtained From Flight Data for the Beech 99 Aircraft. NASA TM-72863, 1979.
- Taylor, L.W., Jr.: A New Criterion for Modeling Systems. Parameter Estimation Techniques and Application in Aircraft Flight Testing, NASA TN D-7647, pp. 291-313, 1974.
- Taylor, L.W., Jr.: Application of a New Criterion for Modelling Systems. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 4, May 1974.
- Taylor, Lawrence W., Jr.; and Iliff, Kenneth W.: A Modified Newton-Raphson Method for Determining Stability Derivatives from Flight Data. Second International Conference on Computing Methods in Optimization Problems, San Remo, Italy, Sept. 9-13, 1968, pp. 353-364, Academic Press, New York, 1969.
- Taylor, Lawrence W., Jr.; and Iliff, Kenneth W.: Systems Identification Using a Modified Newton-Raphson Method: A FORTRAN Program. NASA TN D-6734, 1972.
- Thomas, H.H.B.M.; and Edwards, Geraldine: Mathematical Models of Aircraft Dynamics for Extreme Flight Conditions (Theory and Experiment). Dynamic Stability Parameters, AGARD-CP-235, Paper 27, Nov. 1978.
- Thomas, H.H.B.M.; and Ross, A. Jean: The Role of Theoretical Studies of Flight Dynamics in Relation to Flight Testing. Stability and Control, AGARD-CP-119, Paper 22, Nov. 1972.
- Tomaine, R.L.: The Effect of Pilot Control Input Shape on the Identification of Six Degree-of-Freedom Stability and Control Derivatives of a Transport Helicopter. Master's Thesis, George Washington University, Washington, D.C., Dec. 1976.
- Tomaine, R.L.: Flight Data Identification of Six Degree-of-Freedom Stability and Control Derivatives of a Large "Crane" Type Helicopter. NASA TM X-73958, 1976.
- Tomaine, R.L.; Bryant, W.H.; and Hodge, W.F.: VALT Parameter Identification Flight Test. Fourth European Rotorcraft and Powered Lift Aircraft Forum, Stresa, Italy, Paper 73, Sept. 13-15, 1978.
- Trankle, T.L.; Vincent, J.H.; and Franklin, S.N.: System Identification of Nonlinear Aerodynamic Models. Advances in the Techniques and Technology of the Application of Nonlinear Filters and Kalman Filters, AGARD-AG-256, Paper 7, Mar. 1982.
- Trenkle, F.; and Reinhardt, M.: In Flight Temperature Measurements. AGARD-AG-160, vol. 2, 1973.
- Twisdale, T.R.; Jones, G.L.; and Ashurst, T.A.: A Mission Oriented Flight Test Technique for Identifying Aircraft and Flight Control System Transfer Functions. Flight Test Techniques, AGARD-CP-223, Paper 13, Apr. 1977.
- Van den Boom, A.J.W.: On the Relation Between Weighted Least-Squares Estimators and Instrumental Variable Estimators. Fourth IFAC Symposium on Identification and System Parameter Estimation, Tbilisi, U.S.S.R., Sept. 21-27, 1976, Naum S. Raibman, ed., North Holland, Amsterdam and New York, 1978.
- Van der Linen, J.C.; and Mensink, H.A.: Linear and Angular Position Measurement of Aircraft Components. AGARD Flight Test Instrumentation Series, AGARD-AG-160, vol. 8, 1977.
- Van der Wilt, M.: Flight-Path Reconstruction of Symmetric Unsteady Flights. National Aerospace Laboratory NLR-TR-76133-U, The Netherlands, May 1976.
- Van Trees, H. L.: Detection, Estimation and Modulation Theory. Volume 1. John Wiley & Sons, New York, 1969.
- Van Woerkom, K.: Design and Evaluation of an Instrumentation System for Measurements in Nonsteady Symmetrical Flight Conditions with the Hawker Hunter Mk VII. Delft University of Technology, Department of Aerospace Engineering, Delft, The Netherlands, Report LR-308, Jan. 1981.

- Vaughan, David R.: A Nonrecursive Algebraic Solution for the Discrete Riccati Equation. IEEE Trans. Automat. Control, vol. AC-15, pp. 597-599, Oct. 1970.
- Velkoff, H.R.: Technical Evaluation Report on the Flight Mechanics Panel Symposium on Rotorcraft Design. AGARD-AG-114, Jan. 1978.
- Verbrugge, R.: Rotative Balance of I.M.F. Lille and Associated Experimental Techniques. NASA TM-75886, 1981. (Translation of Balance reotative 'de-71 I.M.F. Lille et Techniques Experimentales Associees'. AAAF Paper NT 80-13, Lille, 1979.)
- Verbrugge, R.A.; Charon, W.; and Marchand, M.: Wind Tunnel and Free-Flight Model Identification Experience. Parameter Identification, AGARD-LS-104, Paper 9, Nov. 1979.
- Vincent, J.H.; Gupta, N.K.; and Hall, W.E., Jr.: Recent Results in Parameter Identification for High Angle-of-Attack Stall Regimes. AIAA Paper 79-1640, Aug. 1979.
- Vleghert, J.P.K.: Measuring Climb Performance of a Propellor Engined Transport Aeroplane Using the Acceleration Technique, AGARD Rep. 127, May 1957.
- Von der Decken, Jan; Schmidt, Eberhard; and Schulze, Bernd: On the Test Procedures of the Derivative Balances Used in West Germany. Dynamic Stability Parameters, AGARD-CP-235, Paper 6, 1978.
- Vorchik, B.G.: Plant Identification in a Stochastic Closed-Loop System. Automation and Remote Control, vol. 36, pp. 550-565, Sept. 1975.
- Vorchik, B.G.; Fetisov, V.N.; and Steinberg, Sh. E.: Identification of a Closed-Loop Stochastic System. Automation and Remote Control, vol. 34, pp. 1069-1081, Dec. 1, 1973.
- Waterfall, A.P.: A Technique for the Automatic Digital Analysis of Flight Dynamic Response Data. A.R.C. R. & M. 3699 (RAE Tech. Rep. 70228), 1970.
- Weiner, Norbert: Extrapolation, Interpolation, and Smoothing of Stationary Time Series: With Engineering Applications. John Wiley & Sons, New York, 1949.
- Wells, W.R.; and Ramachandran, S.: Flight Test Design for Efficient Extraction of Aircraft Parameters. Proc. AIAA Third Atmospheric Flight Mechanics Conference, June 1976, pp. 101-107, AIAA, New York, 1976.
- Wellstead, P.E.; and Edmunds, J.M.: Least-Squares Identification of Closed-Loop Systems. Int. J. Control, vol. 21, no. 4, pp. 689-699, Apr. 1975.
- Whitmoyer, R.A.: Aerodynamic Interactions on the Fighter CCV Test Aircraft. Dynamic Stability Parameters, AGARD-CP-235, Paper 16, Nov. 1978.
- Wiberg, Donald M.: Schaum's Outline of Theory and Problems of State Space and Linear Systems. McGraw-Hill Book Co., New York, 1971.
- Wiberg, D.M.; Bellville, J.W.; Brovko, O.; Maine, R.E.; and Tai, T.C.: Modeling and Parameter Identification of the Human Respiratory System. IEEE Trans. Automat. Control, vol AC-24, pp. 716-720, Oct. 1979.
- Wilhelm, K.; and Verbrugge, R.A.: Correlation Aspects in the Identification of Dynamic Effects Using Complementary Techniques, Flight in Turbulence: Gust Alleviation. Ground Flight Test Techniques and Correlation, AGARD-CP-339, Paper 17, Feb. 1982.
- Wilkinson, James H.: The Algebraic Eigenvalue Problem. Clarendon Press, Oxford, 1965.
- Williams, D.A.: The Analysis of Random Data. AGARD-AG-160, vol. 14, 1981.
- Williams, James L.; and Suit, William T.: Extraction From Flight Data of Lateral Aerodynamic Coefficients for F-8 Aircraft With SuperCritical Wing. NASA TN D-7749, 1974.
- Williams J.E.; and Vukelich, S.R.: The USAF Stability and Control Digital Datcom, Volume 1 User's Manual. AFFDL-TR-79-3032, AD-A086557, Apr. 1979.
- Wilson, Donald B.; and Winters, Charles P.: F-15A Approach-to-Stall/Stall/Post-Stall Evaluation. AFFTC TR-75-32, Air Force Flight Test Center, Edwards Air Force Base, California, Jan. 1976.
- Wingrove, R.C.: Applications of a Technique for Estimating Aircraft States from Recorded Flight Test Data. AIAA Paper 72-965, Sept. 1972.
- Wingrove, R.C.: Quasi-Linearization Technique for Estimating Aircraft States from Flight Data. J. Aircraft, vol. 10, no. 5, pp. 303-307, May 1973.
- Wingrove, R.C.: Parameter Estimation of Powered-Lift STOL Aircraft Characteristics Including Turbulence and Ground Effects. Methods for Aircraft State and Parameter Identification, AGARD-CP-172, Paper 28, May 1975.

- Wolowicz, Chester H.: Considerations in the Determination of Stability and Control Derivatives and Dynamic Characteristics from Flight Data. AGARD-AR-549, Part 1, 1966.
- Wolowicz, Chester H.; and Holleman, Euclid C.: Stability-Derivative Determination from Flight Data. AGARD Rep. 224, Oct. 1958.
- Wolowicz, Chester H.; and Yancy, Roxanah B.: Experimental Determination of Airplane Mass and Inertial Characteristics. NASA TR R-433, 1974.
- Wong, K.V.; and Polak, E.: Identification of Linear Discrete Time Systems Using the Instrumental Variable Method. IEEE Trans. Automat. Control, vol. AC-12, no. 6, pp. 707-718, Dec. 1967.
- Wuest, W.: Pressure and Flow Measurement — Flight Testing. AGARD-AG-160, vol. 11, 1980.
- Yazawa, Kenji: Identification of Aircraft Stability and Control Derivatives in the Presence of Turbulence. AIAA Paper 77-1134, Aug. 1977.
- Yosida, Kosaku: Functional Analysis. Second ed. Springer-Verlag, Berlin, 1968.
- Zacks, Shelemyahu: The Theory of Statistical Inference. John Wiley & Sons, New York, 1971.
- Zadeh, Lotfi A.; and Desoer, Charles A.: Linear System Theory. McGraw-Hill Book Co., New York, 1963.
- Zverev, A.I.: Handbook of Filter Synthesis. Wiley, New York, 1967.

